

Hazardous Substances Advisory Committee (HSAC)

Post-2020 Pollution and Biodiversity Targets

February 2020

Commission

Defra's International Chemicals Team and International Ecosystems Team leading on the Convention on Biological Diversity (CBD) would like HSAC to engage in the development of the Post-2020 Global Biodiversity Framework, with a focus on its target for reducing pollution. A similar target is also being drafted for negotiation within the post-2020 framework of the Strategic Approach to International Chemicals Management (SAICM). It is expected that Parties will agree global level targets and will have flexibility to adapt related national targets to national circumstances. The target is expected to apply to terrestrial, freshwater and marine ecosystems.

We would like the committee to produce:

1. An **HSAC statement** on pollution targets and their indicators for the CBD and SAICM (detailed in the background below). This will convey scientific evidence to inform the development of pollution targets and will be published publicly as an information document for the CBD's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) 24th meeting. It should:
 - a. Set the context of variety of forms pollution may take, briefly discuss the role of sound management of chemicals and wastes in controlling pollution and protecting biodiversity (ecosystems, species populations, genetic diversity) and consider the need for strengthening links between the Convention on Biological Diversity and SAICM.
 - b. Identify the forms of pollution that have the greatest impact on biodiversity loss globally to inform the target development.
 - c. Consider what percentage reduction in pollution (in terms of concentrations and/or impacts) are feasible and desirable to reduce the rate of biodiversity loss globally.
 - d. Consider the proposed indicators in the draft monitoring framework. Are the proposed goals for monitoring and indicators for measuring progress relevant and feasible? Are there any additional indicators and monitoring frameworks available or could be cost effectively developed to measure pollutants and/or their impacts on biodiversity that should be considered?

While this will be used as a standalone document for SBSTTA and SAICM, we will also discuss the further development of the statement at the 26th HSAC meeting in July to incorporate the more domestic element of biodiversity loss. Here we would like the committee to identify the forms of pollution that have the greatest impact on biodiversity in the UK to inform our CBD implementation efforts, including in the National Biodiversity Action Plan. We will also consider whether costs of inaction could also be incorporated.

2. An **HSAC opinion** on the currently proposed pollution targets for internal use only by the Defra Biodiversity team to inform the development of a UK position. This should provide HSAC's views on the proposed targets and their preferred option for the target wording which will be the most effective in reducing the rate of biodiversity loss. Please provide the committee's rationale for their position.

Delivery

The targets and indicators in the zero-draft will be subject to negotiation in the next six months to the CBD Conference of Parties (COP15) in October 2020, although this is currently facing delays due to the Coronavirus outbreak. The HSAC statement will be prepared for the scientific body overseeing the development of the post 2020 Global Biodiversity Framework – the Subsidiary Body on Scientific, Technical and Technological Advice. Its next meeting ([SBSTTA 24](#)) was due to take place on 18-23rd May 2020 but has been delayed due to Coronavirus. Progress on the post-2020 framework on SAICM has also been delayed. Consequently, a draft of the statement should be prepared by the end of May 2020 for review by the Defra team.

The HSAC opinion will be required in advance of the 26th HSAC meeting (9th July 2020) for discussion. This will be used internally by the biodiversity team in preparation for the Third Open Ended Working Group meeting of the CBD where the targets will be discussed, potentially in July/August. At HSAC's 26th meeting in July there will be discussion on the further development of the statement to consider domestic situation with pollution and biodiversity with the National Biodiversity Action Plan in mind.

Background

The Convention on Biological Diversity

The Convention on Biological Diversity (CBD) was opened for signature at the Earth Summit in Rio de Janeiro on 5 June 1992 and entered into force on 29 December 1993. It has three main objectives:

1. The conservation of biological diversity
2. The sustainable use of the components of biological diversity
3. The fair and equitable sharing of the benefits arising out of the utilization of genetic resources

In its Strategic Plan for 2011-2020 the CBD set a series of strategic goals and targets (including "[Aichi Targets](#)") to take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being, and poverty eradication. It is accepted that most of these targets have not been met, global biodiversity loss has not been stemmed because of the continued pressure from direct and indirect drivers of biodiversity loss. These drivers have been identified by [the IPBES Global Assessment Report on Biodiversity and Ecosystem Services](#) as:

- Direct drivers: changes in land and sea use, direct exploitation of organisms, climate change, pollution and invasion of alien species.
- Indirect drivers: demographic and sociocultural, economic and technological, institutions and governance, conflicts and epidemics.

The Post-2020 Global Biodiversity Framework

At the COP15 in October 2020 the CBD will adopt a Post-2020 Global Biodiversity Framework as a stepping stone towards the 2050 Vision of "Living in harmony with nature". A "zero draft" of the framework has been produced by the Co-Chairs of the Open-Ended Working Group (OEWG) on the Post-2020 Global Biodiversity Framework, which is tasked with advancing its development in preparation for its adoption in October.

The zero draft of the framework¹ applies a "theory of change" approach, a strategic planning framework used to help plan, implement and evaluate the impacts of the actions taken. It includes a series of new targets for 2030. As a top five driver of biodiversity loss, pollution is addressed in the following target to reduce threats to biodiversity loss:

Reduce by 2030 pollution from excess nutrients, biocides, plastic waste and other sources by at least [50%]

The target has been recently discussed at the Open-Ended Working Group on the Post-2020 Global Biodiversity Framework (February 2020) where several suggestions for adaptations to the target wording were made². These are as follows:

(a) Reduce by 2030 pollution from excess nutrients, biocides, plastic waste and other sources by at least [50%], [addressing their impacts on biodiversity, ecosystem services, ecosystem functions and human health];

(b) Reduce by 2030 pollution [in terrestrial and marine ecosystems by at least [XX%] through the implementation of best practices in the models of production and consumption of productive sectors];

(c) Reduce by 2030 pollution [in water, soil and air] from excess nutrients, biocides, plastic waste and other sources by at least [50%];

(d) Reduce by 2030 pollution [from all sources, in particular] from excess nutrients, biocides, plastic waste and other sources, by at least [50%];

(e) Reduce by 2030 pollution from excess nutrients, biocides, plastic waste, [artificial light, underwater noise, sediment] and other sources by at least [50%];

(f) Reduce by 2030 pollution from excess nutrients, biocides, plastic waste and other sources, in particular from mining activities, industries/manufacturing, tourism, and domestic wastes, by at least [50%];

(g) Reduce by 2030 pollution from excess nutrients, biocides, plastic waste, nitrogen, phosphorus, waste, pesticides and other sources by at least [50%];

(h) Reduce by 2030 pollution from excess nutrients, chemicals, plastic waste and other sources down to levels that are not detrimental to biodiversity and ecosystem functions by at least [50%] each;

(i) By 2030 [the production and use of problematic and unnecessary plastics has been phased out, the recovery rate of all waste materials has been increased by [x%], and] pollution from excess nutrients, biocides, waste and other sources [has been reduced] by at least [50%];

(j) Reduce by 2030 pollution from excess nutrients, [inappropriate use of] biocides, plastic waste and other sources, [in accordance with the existing or future specific international processes] by at least [50%];

(k) [By 2030, pollution from all sources has been brought to levels that are not detrimental to ecosystem function and biodiversity, in particular:

- pollution from fertilizers is effectively reduced and the excess use is eliminated the risk and impacts of use of chemical pesticides is reduced and the uptake of integrated pest management and biocontrol is increased

- proportion of agricultural area managed with no pesticides increased - input of plastic pollutants into terrestrial and aquatic ecosystems is halted

- noise and light pollution reduced to levels compatible with the conservation of biodiversity]

(l) [By 2030, levels of key pollutants in the environment that adversely affect ecosystem function and biodiversity have been [reduced by x%][substantially reduced]];

(m) [By 2030, Parties have assessed pollution affecting biodiversity and ecosystems and have developed and are implementing strategies that aim to reduce pollutants by at least [50%]];

(n) [Reduce by 2030 pollution from excess nutrients, biocides, plastic waste and all other sources by at least [50%], prioritizing pollutants that impact on vulnerable groups, such as women, children, and indigenous peoples and local communities.]

Given that the target aims to reduce the rate of biodiversity loss it is crucial that it is appropriately focussed on the right pollutants, that success is measurable and that achieving the target itself will be effective in reducing the rate of biodiversity loss.

In addition, a draft monitoring framework³ has been produced to accompany the zero draft containing a series of indicators against each target to allow progress to be measured. For the pollution target these are as follows:

Draft 2050 Goals	Suggested elements of the goals for monitoring	Suggested indicators
Reduce by 2030, pollution from excess nutrients, biocides, plastic waste and other sources by at least [50%].	Change in the trends in nitrogen waste	Nitrogen Use Efficiency. Nitrogen + Phosphate Fertilizers (N+P2O5 total nutrients). Trends in Loss of Reactive Nitrogen to the Environment. Trends in Nitrogen Deposition
	Change in the rate of pesticide use.	Amount of pesticide use
	Change in amount of other pollutants (including light and noise).	Index of Coastal Eutrophication (ICEP) and Floating Plastic debris Density. Proportion of reusable, recyclable or where viable alternatives do not exist, recoverable plastics.
	Change in the impact of pollution on biodiversity.	Index of Coastal Eutrophication (ICEP) and Floating Plastic debris Density Proportion of bodies of water with good ambient water quality. Red List Index (impacts of pollution).
	Change in the number of countries with effective waste and pollution management programmes and policies.	Number of countries with effective waste management plans

Initial discussions on the draft target areas, including pollution, occurred during the Subsidiary Body on Scientific, Technical and Technological Advice 23 meeting in November 2019⁴. Some noted that pollution is a cross-cutting issue that would benefit from seeking an expert opinion and possible further submissions on this issue to help inform discussions. It is hoped that HSAC can contribute their expert opinion on this basis.

The Strategic Approach to International Chemicals Management

SAICM is a UN-backed chemicals framework adopted in 2006 by the First International Conference on Chemicals Management. Its overall objective is to achieve Sustainable Development Goal 12.4: the achievement of sound management of chemicals throughout their life cycle so that by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health. More recently it has also incorporated wastes, including plastic waste. It is widely recognised that this goal will not be achieved and SAICM is now developing its post-2020 framework, complete with specific objectives, targets and indicators, through an intersessional process.

An initial framework including draft targets and indicators was presented to the third meeting of the intersessional process (IP3) in Bangkok in October 2019. Initially there was no target or related indicators considering the impacts of pollution on biodiversity within this framework. Nonetheless, opportunities for synergies with the Global Biodiversity Framework for CBD have been flagged at SAICM meetings, including a Defra funded international technical expert workshop on indicators held in Cambridge in September 2019. Here it was suggested that ways should be explored to capitalize on and support those conventions, frameworks and processes that already have

indicators, data collection and reporting processes in place. Several countries and stakeholders recognise the importance of creating a tangible link between the Post-2020 framework on chemicals and waste and the Post-2020 Global Biodiversity Framework though further discussions will be needed and are planned.

A series of proposals for new targets which link chemicals and biodiversity developed at IP3 are being presented for discussion at the fourth meeting of the intersessional process (IP4) in 2020⁵. These include:

Chemicals or groups of chemicals of global or regional concern, have been identified and phased out or effectively restricted at the national level, throughout the entire life cycle, including the waste stages, in ways that exposure of humans and the environment is prevented or restricted.

By 2030, pollution from chemicals (throughout their life-cycle) and waste, including from excess pesticides and nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Reduction of harm to biodiversity by chemicals or groups of chemicals of global and regional concern.

HSAC should note that there are currently no indicators developed for these proposed targets under SAICM. With target negotiations ongoing, we will provide relevant updates on the progress of biodiversity targets and their wording to HSAC after IP4 to feed into this work.

Policy linkage

In the 25 Year Environment Plan Defra has pledged to provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity. Under actions we will take we have stated that we will use the UK's influence to take a leading role in developing an ambitious post-2020 international biodiversity strategy. We will work with partners internationally to make sure that a robust evidence base informs the adoption of ambitious, realistic and measurable post-2020 targets at the 15th Conference of the Parties of the CBD in 2020. Reducing pollution is an objective of the 25 Year Environment Plan in itself, and to contribute towards this we have stated that we will work to set long term aspirational goals beyond 2020 for SAICM.

Future work

The negotiations on post-2020 frameworks for CBD and SAICM will continue until they are due to be adopted (separately) in October 2020. There are therefore likely to be further opportunities for HSAC to engage with these fora during the 20/21 work programme. We will look to develop the work further at the 26th HSAC Meeting in July 2020.

Supporting documents

1. [Zero Draft of the Post-2020 Global Biodiversity Framework](#)

2. [Report of the Co-Leads of Contact Group 2 \(Reducing threats to biodiversity\) – Targets 1 to 4](#). Open-Ended Working Group on the Post-2020 Global Biodiversity Framework, 2nd Meeting (February 2020).
3. [Zero Draft Addendum: Preliminary Draft Monitoring Framework for the Goals and Preliminary Draft Monitoring Framework for Targets](#)
4. [Recommendation Adopted by the Subsidiary Body On Scientific, Technical And Technological Advice: 23/1 Informing the scientific and technical evidence base for the post-2020 global biodiversity framework](#)
5. [SAICM/IP.4/3 Proposed targets prepared by the Technical Working Group on targets, indicators and milestones for SAICM and the sound management of chemicals and waste beyond 2020](#) (Appendix I contains new proposed targets and indicators)